

REMARKS

Claims 4, 5, 7, 8, 10, 11, 13, 14, 16, 17, 19, 20, and 22-29 remain pending after amendment.

Amendments under Consideration

Upon the filing of the RCE, entry of the response of January 9, 2006 was requested. An additional response of March 9, 2006 was filed together with the RCE. Thus, while the Examiner in the Action indicates that claims 1-20, 22 and 23 are pending, this is incorrect as claims 1-3, 6, 9, 12, 15 and 18 were cancelled in the response of January 9, 2006. Hence, claims 4, 5, 7, 8, 10, 11, 13, 14, 16, 17, 19, 20 and 22-29 remain pending at this time.

Claim Amendments

By this amendment, claims 4, 5, 10, 11, 16, 17, 19, 20, 22 and 23 are amended. New claims 24-29 are added.

More specifically, claim 4 is amended to delete reference to embodiments pertaining to formulas (2) and (3). New claims 24-29 are presented separately directed to embodiments (2) and (3). Various editorial revisions are made in the claims.

New claims 26 and 27 now recite the ratio of "17.0:4.3 to 12.0:36.0", support for which resides at Table 3 of the specification, and claims 10 and 11 recite the ratio "17:4.3 to 17:8.5" based on Table 1 of the specification. No new matter is added by this amendment.

Interview with Examiner

Applicants thank the Examiner for the courtesy extended toward their representative during the interview of July 12, 2006. During the interview, the above amendments were discussed. The Examiner confirmed during the interview that newly-presented claims 24-29 appear to be directed to allowable subject matter as being directed to the embodiments of formulas (2) and (3) which are not taught by the cited prior art. The Examiner also indicated during the interview that the attached Declaration under 37 CFR 1.132 would appear to assist in overcoming the rejection under 35 USC 103(a).

However, the Examiner also indicated that she was awaiting receipt from the Patent Office translation staff of translations of the prior art relied upon in support of the rejections. As a result, the Examiner indicated during the interview that no decision regarding the allowance of the claims could occur until the Examiner has an opportunity to review such translations.

Rejection of Claims 1-20 and 22-23

Claims 1-20 and 22-23 stand rejected under 35 USC 103(a) as being unpatentable over Yamamoto et al '807 in view of Yagi et al '182 and Yutaka et al '772.

As noted above, claims 4, 5, 7, 8, 10, 11, 13, 14, 16, 17, 19, 20 and 22-29 were pending at the time of the rejection, as opposed to claims 1-20 and 22-23 as indicated by the Examiner.

In support of the rejection, the Examiner takes the position at page 3 of the Action that "Therefore it would have been obvious for an artisan of ordinary skill in the art at the time of the invention to use the vinylidene copolymers of Yagi et al in the

adhesive composition as taught by Yamamoto et al. The motivation would have been a reasonable expectation of obtaining an adhesive composition having adequate heat resistance, good transparency, and good adhesivity as taught by both Yamamoto et al and Yagi et al in the absence of unexpected results and/or convincing arguments to the contrary.”

The Examiner further states at page 3 of the Action “Therefore, it would have been obvious for an artisan of ordinary proficiency to use the combined teachings of Yamamoto et al and Yagi et al to produce a pellicle. In addition to it being common knowledge in the pellicle art, Yamamoto et al teaches using fluorinated adhesives as sealant and adhesives for optical instruments, wherein the pellicles would be included the broad disclosure of optical instruments.”

The rejection is respectfully traversed.

In response, the primary reference of Yamamoto et al is relied upon as disclosing an adhesive composition comprised of a monomer containing a fluoroalkyl group and a fluorine-containing polymer. The Examiner acknowledges that the reference does not teach a fluorine-containing monomer of formula (2). The Examiner relies on Yutaka et al as showing the adhesives comprising fluorinated polymers and a di-functional fluorinated monomer. Yagi is relied upon as teaching an adhesive comprised of a fluorinated polymer and a fluorinated monomer. However, all references are silent with respect to a pellicle to which is attached a pellicle frame.

Applicants note that Yutaka et al ‘772 is directed to a curable insulating material, and does not describe any adhesive. Accordingly, the Examiner's position regarding this reference is improper.

The other references relied upon by the Examiner (Yamamoto et al and Yagi et al) do not describe the embodiment defined by formulas (2) and (3), now recited in newly-presented claims 24 and 25. Accordingly, claims 24 and 25 are believed to be

directed to allowable subject matter as discussed during the interview.

With regard to the remaining claims, although Yamamoto mentions use as an adhesive, Yamamoto does not describe any adhering function of his photocurable composition. The Examples of Yamamoto merely describe the production of cured films, but the reference does not describe the use of his composition for an adhesive. The measured effects shown in Table 1 relate only to refractive index and shore hardness. The specification of Yamamoto states the disclosed photocurable composition can be used for controlling the refractive index, but does not give any proof that the disclosed composition can be effectively used as an adhesive. Therefore, Yamamoto does not teach or suggest an adhesive – there is accordingly no motivation to use the composition of Yamamoto, whose adhesive function is unclear, for making a pellicle.

The Examiner states "it is well-known in the art of pellicle films to adhere a pellicle film to pellicle frames using fluorinated adhesive composition as disclosed in the description of the Related Art section". However, the related art section actually states " In order to solve such problems about the adhesives for pellicle films made of fluorine-containing polymers, a pellicle comprising a pellicle film made of a fluorine-containing organic substance adhered to a pellicle frame with an adhesive made of the same fluorine-containing organic substance has also been proposed (Japanese Patent Application Laid-open No. 6-67409)". From the underlined portion, the adhesive mentioned in the related art section is the same fluorine-containing polymer as that used in the pellicle film. Therefore, the related art section does not teach other kinds of fluorine-containing adhesives than the fluorine-containing polymers used in pellicles for making pellicles.

In fact, JP-A No. 6-67409, mentioned in the quoted portion above in applicants' specification, states at column 4 "when an amorphous fluorinated polymer is used as

the material for pellicle films, practical adhesion strength cannot be obtained by acryl-based adhesives or epoxy-based adhesives since the fluorinated polymer is excellent in releasing property". This indicates the use of acrylic adhesives (including the acrylic adhesive used as a component of the adhesive according to the invention) is not preferred.

Further, column 6 of JP-A No. 6-67409 recites "it is found that when the pellicle film is made of a fluorine-containing organic substance and the adhesive for adhering the pellicle film to a pellicle frame is made of the same or similar fluorine-containing organic substance as the pellicle film, the adhesive has large adhesive strength and is not substantially deteriorated by light, and thus a pellicle with long life and high performance can be obtained. Further, it is confirmed that the fluorine-containing polymers such as those previously proposed by the present inventors should be used for making the pellicle film, whereby the present invention was completed." From this description, JP-A No. 6-67409 teaches adhesives made of fluorine-containing polymers, and has nothing to do with the fluorine-containing acrylic monomer used in the present invention. Indeed, the adhesive disclosed in JP-A No. 6-67409 utilizes the high compatibility obtained by use of a similar substance to the material of the pellicle film, and thus has to be a fluorine-containing polymer. The examples of the adhesive described in JP-A No. 6-67409 are polymers such as TEFLON AF and CYTOP.

Consequently, contrary to the Examiner's interpretation, the related art section of the present application *teaches away from* the use of the claimed acrylic-based adhesive for adhering a fluorine-containing pellicle film.

In the present application, it is demonstrated that unexpectedly superior effects can be achieved by use of the adhesive according to the invention for adhering a fluorine-containing pellicle film to a pellicle frame, as compared to conventional

adhesives such as the adhesive described in JP-A No. 6-67409.

In Comparative Example 3 of the present application, CYTOP CTX type-A, which is the same adhesive as that used in the example of JP-A No. 6-67409, is used, and it is described that the conventional adhesive gave sufficient adhesive strength but caused discoloration and was inferior in productivity. The above advantageous effects achieved by the adhesive according to the present invention as compared to conventional adhesives cannot be expected nor anticipated from the disclosures of the cited references and the related art section of the present application.

In an attempt to further demonstrate the unobviousness of the claimed invention, applicants submit herewith a Declaration under 37 CFR 1.132 which is directed to the Yagi et al reference. As discussed during the interview, the Declaration compares the adhesive strength of adhesive films prepared according to Yagi et al with those of the present invention in connection with the adhesion to pellicle frames. The Declaration confirms that peeling of the pellicle film occurred at a lower air pressure when the adhesive of Yagi et al was used.

Thus, even if the teachings of Yagi et al are believed appropriately combined with the remaining references in an attempt to yield the claimed invention, the Declaration confirms that such a combination would not provide those advantages otherwise provided by the claimed invention.

In view of the above, the rejection is without basis and should be withdrawn.

The application is now in condition for allowance. An early indication of same is earnestly solicited.


A check in the amount of \$120.00 is attached as payment for the requested one month extension of time.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to our Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

Dated:

JUL 21 2006

Respectfully submitted,

By 

Marc S. Weiner

Registration No.: 32,181

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Rd

Suite 100 East

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorney for Applicant

Attachment: Declaration under 37 CFR 1.132